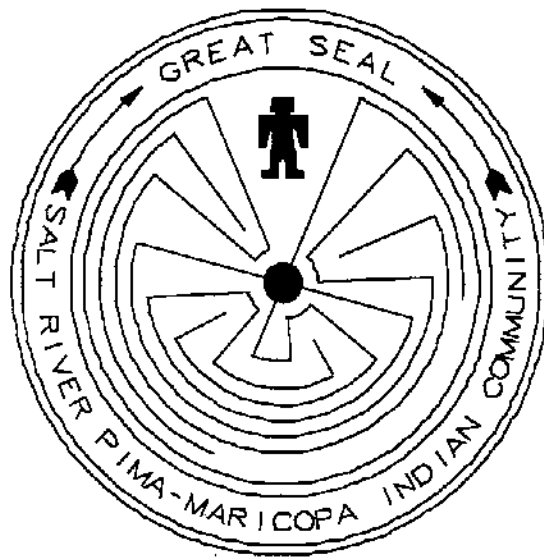


**Clean Water Action Plan  
Unified Watershed Assessment  
Salt River Pima-Maricopa Indian Community**



**Salt River Pima-Maricopa Indian Community  
Cultural and Environmental Services  
December 3, 1998**

## **CLEAN WATER ACTION PLAN UNIFIED WATERSHED ASSESSMENT – SALT RIVER PIMA- MARICOPA INDIAN COMMUNITY, ARIZONA**

**BACKGROUND:** The *Clean Water Action Plan* seeks to target federal funding toward specific watersheds through the implementation of three elements described in the *Final Framework for Unified Watershed Assessments, Restoration Priorities, and Restoration Action Strategies* (June 9, 1998). These are: a) conducting a Unified Watershed Assessment to identify watersheds targeted for funding, b) determining Restoration Priorities among target watersheds, and c) developing Restoration Action Strategies to address water quality issues within targeted watersheds.

**THE GENERAL FRAMEWORK:** The *Final Framework* calls for sorting individual watersheds (defined by 8-digit USGS Hydrologic Unit Code – HUC) into four categories, as follows:

Category I – Watersheds in Need of Restoration (thus eligible for additional federal funding made available under the President’s proposed FY99 Clean Water and Restoration Budget Initiative)

Category II – Watersheds Needing Preventative Action to Sustain Water Quality

Category III – Watersheds with Pristine or Sensitive Aquatic System Conditions on Lands Administered by Federal, State, and Tribal Governments (eligible for funding if available beyond needs of Category I watersheds)

Category IV – Watersheds With Insufficient Data to Make an Assessment

**UNIFIED WATERSHED ASSESSMENT:** The purpose of a unified water assessment is for the stakeholders to “unify” the protection and restoration of their common watersheds. The State of Arizona defines a Category I watersheds to be either: 1) watersheds (defined by 8-digit HUC) in which at least one lake or stream segment appears on the Arizona List of Impaired Waters (Clean Water Act § 303(d) list) or 2) includes a Geographic Priority Area, as determined by Natural Resource Conservation District Local Work Groups. These were assembled under the 1996 Farm Bill to guide funding decisions by the State Technical Committee. While inclusion on the 303(d) list does bring legal requirements to address the causes for listing, it does not necessarily imply that watershed restoration is needed. Geographic Priority Areas may not be related to a particular water body or water quality. Thus, in Arizona, Category I watersheds are defined simply as, “Watersheds on the 303(d) List or the NRCS Geographic Priority Area List.”

The SRPMIC also uses part of the same definition as the State of Arizona does for Category I watersheds. The SRPMIC uses the determination of potential impacts from water pollution sources in the affected watersheds. Because it is a Tribe, the SRPMIC does not have a List of Impaired Waters per Section 303 (d) of the Clean Water Act. Also, the SRPMIC only has two watersheds to categorize.

**DEFINING WATERSHED RESTORATION PRIORITIES:** Various agencies maintain lists, which may be used to define watersheds. The SRPMIC based part of the determination of Category I watersheds on lists from the following agencies:

<ul style="list-style-type: none"> <li>• Geographic Priority Area</li> <li>• Critical Habitat for Threatened and Endangered Species*</li> <li>• List of known nitrate plumes</li> <li>• Critical Water Supply Areas</li> <li>• Proper Functioning Condition Analysis*</li> </ul>	NRCS USFWS SRPMIC SRPMIC BLM
*Note: These lists were not available in time to include in this draft but may be used later during the development of restoration strategies.	

**SELECTION FACTORS FOR CATEGORIES II-IV:** Specific selection factors for the remaining categories are as follows:

<b>Category II – Watersheds Needing Preventative Action to Sustain Water Quality.</b>	
HUCs for which there is:	
a) at least one reliably assessed site/area/water body/resource component; and	
b) no known impaired resources.	
<b>Category III – Watersheds with Pristine or Sensitive Aquatic System Conditions on Lands Administered by Federal, State, and Tribal Governments.</b>	
HUCs for which there is identified a site, area, water body or resource on any of the following lists:	Agency maintaining list
Tier III waters (Unique waters) Identified critical habitat and Occupied habitats for federal and state listed species Wild and/or scenic rivers	SRPMIC/F&W SRPMIC/F&W SRPMIC NPS/USFS
<b>Category IV – Watersheds With Insufficient Data to Make an Assessment.</b>	
HUCs for which there is:	
a) no reliably assessed resource, OR	
b) no Unified Watershed Assessment Category otherwise assigned.	

**EXISTING EFFORTS:** Several assessment activities have been conducted. This Unified Watershed Assessment uses only selected information collected and maintained by the Salt River Pima-Maricopa Indian Community and federal agencies which is: 1) data in or is readily converted to a GIS format, 2) readily accessible, and 3) sorted or able to be sorted by Category criteria.

**GEOGRAPHIC SCALE AND ASSESSMENT CRITERIA:** Using USGS 8-digit cataloging units (Hydrologic Unit Code or HUC) as the geographic scale for Unified Watershed Assessments has certain drawbacks. The first of these is that HUCs are assigned to stream segments and lakes, not watersheds. The watersheds associated with the HUCs are inferred by delineating the catchment area for that HUC. With one exception, the division of whole watersheds into 8-digit HUCs does account for

- a process for involving diverse federal, state, tribal, and local agencies, conservation district/land conservation departments, the public, and others in reviewing existing restoration priorities and either revising them or establishing new ones.

Many existing priority-setting mechanisms were reviewed to help establish priorities including source water protection priorities under the Safe Drinking Water Act, NPDES, and others.

**PRODUCTS AND SCHEDULES:** Beginning in FY1999, Watershed Restoration Strategies will be developed and implemented to plan activities in the watershed most in need of attention (Category I watershed). Some of the considerations in developing this strategy will include practicability of proposed activities, the willingness of one or more agencies to fund and/or carry out an activity, and the input of community members. Watershed restoration strategies will include a schedule for completing each of the priority projects.

Products of the Unified Watershed Assessment consists of two elements:

- a list and map of all watersheds within the tribal boundaries, aggregated to the 8-digit hydrologic unit (each denoted as Category I, II, III, and/or IV); and
- a one- or two-page description of the processes, participants, rationale, and information used to make the determinations.

The watershed restoration priorities consist of three elements:

- identification of the Category I watershed most needing restoration, beginning in 1999-2000;
- a preliminary long-term schedule for attention to all remaining Category I watersheds; and
- a two- or three-page description of the processes, participants, rationale, and information used to make priority decisions.

A schedule for completing, soliciting, community comment on, and submitting the outcomes of the Unified Watershed Assessment and Watershed Restoration Priorities is set forth in the *Final Framework for Unified Watershed Assessments, Restoration Priorities, and Restoration Action Strategies*. This schedule is presented as follows:

**Products and schedules set forth in the Final Framework for Unified Watershed Assessments, Restoration Priorities, and Restoration Action Strategies.**

Deadline	Product	Purpose or process
December 1, 1998	Draft Unified Watershed Assessments Draft watershed restoration priorities	For federal and community member review
January 15, 1999	Comments due from public and federal agencies on draft Unified Watershed Assessment plan	To refine the proposed strategy for conducting the Unified Watershed Assessment

hydrologically significant natural features, such as the confluence of tributaries. The exception is the 8-digit HUC that defined the segment of the Salt River above and below the confluence of the Verde River. In this case, the 8-digit HUC of this segment of the Salt River has been divided into segment "a" (upstream of the Verde) and segment "b" (downstream of the Verde).

The scale of 8-digit watersheds in Arizona does not always provide the desired resolution. Category I watersheds are those in which reasonably current information shows non-attainment of clean water or other natural resource goals in at least one reliably assessed water body, aquifer or natural resource component within the 8-digit watershed.

In spite of some drawbacks, the common usage of 8-digit HUCs within databases makes it a useful measure for reporting the assessment results and priorities on the national scale envisioned in the *Clean Water Action Plan*.

**SELECTING APPROPRIATE DATA AND TOOLS:** State, tribal, federal, interstate agencies, and others collect and use environmental data on a watershed basis. This information forms the foundation of the Unified Watershed Assessment. Many national data sources and tools were evaluated to determine their usefulness. For some of these, the decision not to use them was based on the time that would have been required to transfer the data to a GIS format or to computer databases.

Current monitoring and assessment activities are waterbody-specific or site-specific, and scientifically defensible extrapolations about the condition of the hydrologic unit code area (watershed) cannot be accurately made.

**DEVELOPING RESTORATION STRATEGIES:** The watershed restoration priority setting process builds on the findings of the *Unified Watershed Assessments*. The *Clean Water Action Plan* asks states/tribes to take the lead and involve all appropriate agencies, organizations, the public, and other stakeholders. Partners in this process include the agencies involved and a public review and comment process will be employed to solicit community input.

First, to be included on the List of Impaired Waters (Category I), adequate data had to be available to suggest a water quality problem. Furthermore, all of the water quality concerns were reviewed according to the severity of contamination, human health risk, and density of water quality problems within the watershed.

**EXISTING EFFORTS:** Identifying watershed restoration priorities relies primarily on existing tools, data, and processes. The *Clean Water Action Plan* asks tribes to consider the following in their prioritization process:

- criteria for defining watersheds in most need of restoration;
- a long term action schedule for developing response plans and focusing on 1999-2000; and

February 1, 1999	Final Unified Watershed Assessments Final watershed restoration priorities	For targeting new resources to accelerate restoration in FY 1999 and 2000
Spring/ Summer 1999	Develop and implement watershed action strategies	To direct activities to restore those watersheds most needing attention

**SPECIFIC RATIONALE FOR USING SELECTED DATABASES:** Watersheds on the NRCS Geographic Priority Area List – Category I watersheds have within them at least one waterbody that fails to meet Clean Water Act goal or groundwater that is impacted (as represented by SRPMIC Water Quality Standards for assigned Designated Use categories) or at least one Geographic Priority Area (as determined by the NRCS).

**Geographic Priority Areas** – The *Clean Water Action Plan* targets Category I watershed restoration for most new resources made available through the President's FY 1999 EPA Clean Water and NRCS Watershed Restoration Budget Initiative. A locally led conservation process and state technical committee was used to recommend priorities for agricultural conservation programs to protect and restore natural resources. This process enables the use of various funding mechanisms under the 1996 Farm Bill. With the assistance of NRCS, areas of similar problems and concerns were grouped into Geographic Priority Areas (GPAs) and ranked based on environmental, economic, social and partnership factors. As defined under the general framework for Category I, GPA's are being used in this unified assessment to represent areas that do not meet natural resource goals by the Salt River Pima-Maricopa Indian Community (SRPMIC).

**Category II – Watersheds Needing Preventative Action to Sustain Water Quality** – Category II watersheds need continuing management under base clean water programs and natural resource programs to maintain water quality and conserve natural resources, but have no identified immediate restoration needs.

Water quality assessments look at water quality at the time of the assessment, based on monitoring for specific stressors or pollutants. The Clean Water Act does not require (or fund) assessment of potential sources which have not yet manifested themselves in water quality standards violations.

**Category III – Watersheds with Pristine or Sensitive Aquatic System Conditions on Lands Administered by Federal, State, and Tribal Governments** – These watersheds have water bodies with exceptionally pristine water quality or other sensitive aquatic system conditions that are located on lands administered by federal, state, or tribal governments. Various agencies maintain lists of geographic areas which fit this criteria. These lists fall into three categories: 1) Tier III waters (unique waters); 2) species-based, where identification of a geographic area is sequent to the identification of the species of concern (in example, threaten or endangered; and 3) land-based, where wild and scenic designation is the method by which the geographic area is listed.

**Category IV – Watersheds with Insufficient Data to Make an Assessment –** Reliable water quality assessments can be either of two types: 1) a “monitored” assessment, or 2) an “evaluated” assessment. For an assessment to be considered “reliable” the following criteria must be met:

- Monitored assessment are based on current monitoring data of two types:
  - Chemical/physical water quality samples or
  - Multiple sites and multiple media (fish, sediment, water, and physical integrity) monitored during a survey.
- Evaluated assessments are ones in which insufficient data is available for a monitored assessment; however, the following data or information is available:
  - More than one water quality sample, which included key parameters of concern for that waterbody; or
  - Water quality data that is older than 5-years; or
  - Sediment, animal tissue, or water sample data compared with applicable criteria, such as soil remediation standards; fish and wildlife tissue criteria; total dissolved solids (TDS) criteria for agriculture irrigation (established by EPA); or
  - Reliable information concerning noncompliance with narrative surface water standards (e.g., debris, bottom deposits, water films, fish advisories, beach closures, fish kills, etc.); or
  - Reliable information concerning conditions judged to cause impairment (i.e., reduced fish reproduction, excessive algal blooms or weed harvesting); or
  - Extrapolation of data from upstream or downstream monitoring sites.

The watersheds sorted into Category IV lack data, critical data elements, or the data density needed to make a reliable assessment. Assigning a water body to Category IV means that more assessment is needed and such activities should be pursued. A comprehensive, on-going water quality data collection system should be established to collect information needed to identify and address water quality and other natural resource problems. Such an initiative will take time and money to accomplish; however, the miniscule federal funds for Tribes to assess basic water quality data collection have declined over the years.

## **RESULTS OF ASSESSING THE SRPMIC WATERSHEDS**

### **Category I Watersheds Priority Ranking**

<b>Watershed Number</b>	<b>Water shed Name</b>	<b>Priority</b>
15060106	Lower Salt River Area	High

This watershed is a critical drinking water supply watershed for the Salt River Pima-Maricopa Indian Community. There are several point and nonpoint pollution sources

contributing to this watershed. SRPMIC is in agreement with the State of Arizona that this watershed is a Category I watershed (impacted) and needs to be restored. Sources contributing to the pollution of the Category I watershed on the SRPMIC include:

1. Wastewater Treatment Plants
2. Area sources of nitrate
3. Agricultural Chemical Use

#### **Category IV Watersheds Priority Ranking**

<b>Watershed Number</b>	<b>Water shed Name</b>	<b>Priority</b>
15060203	Lower Verde River	Medium

The State of Arizona ranks the Lower Verde River as a Category I watershed (with a priority). The SRPMIC disagrees with this finding, at least for the portion of river located on the reservation. Although a portion of the Verde River is listed on the State of Arizona's 303(d) Listing, this portion of the river does not lie within the boundaries of the SRPMIC. SRPMIC believes that the portion of the Lower Verde River located within SRPMIC boundaries should be ranked in Category IV due to insufficient data. To date, the SRPMIC has not conducted any testing on that portion of river located on the reservation. A testing plan is being developed and should begin within the next few months or early next year.

#### **Watershed Restoration Priorities (WRP)**

**Existing Watershed Protection Projects** – Some projects have started this fiscal year (FY99) to protect the watershed (Lower Salt River – 15060106) with the most urgent needs and the critical drinking watershed in the SRPMIC. As previously mentioned, this watershed has been impacted by several different sources within the Salt River Indian Community and by several different methods of transport. The current projects and their descriptions are as follows:

- The transport pathways for pollution to impacts to groundwater have been studied under recent Clean Water Act Section 106 grants. The studies found that abandoned wells were one direct conduit for surface water pollution to get in to the watershed. The FY 99 Section 106 grant funded a study to inventory, map, and determine which abandoned wells are contributing to groundwater pollution and have the highest risk priority for being closed. The funds also will be used to study methodologies or an implementation plan for an abandon wellhead closures.



- A joint study with the Inter-Tribal Council of Arizona, Inc. (ITCA) is working on determining the amounts and locations of pesticides in the groundwater of the watershed. EPA funds ITCA for their part of the study.
- Wastewater treatment plants are believed to be point sources of water pollution to the Lower Salt River watershed. A study funded under the Clean Water Act, Section 104 (b) - National Priority Discharge Elimination System (NPDES) has been received to determine the impacts of these pollution sources to the watershed.
- A Public Water Supply Supervision (PWSS) grant from EPA, funded under Section 1442 of the Safe Drinking Act, was awarded to the SRPMIC for this fiscal year. The Purpose of the project is to establish wellhead protection areas (WHPAs) on SRPMIC land and develop a management plan that will incorporate the use of identified WHPAs in the Community's development planning process.

To assist in data development in the Lower Verde River watershed (15060203), a Memorandum of Understanding (MOU) was signed with the United States Forest Service (USFS) and the United States Fish & Wildlife (USFW). The MOU is for the SRPMIC, USFS and the USFW to work cooperatively in the vicinity of the Verde River and determine the number (if possible) and habitat location of the endangered species. This study will include both the terrestrial and aquatic endangered species. With this information and more water quality data, it may be determined that the Lower Verde River watershed is a Category III watershed in the Salt River Indian Community.

#### **Future Financial and Technical Support Needs**

Future projects for FY 1999-2000 that can be a result of future grants from EPA for the Lower Salt River watershed are:

- Scottsdale Feedlot is a source of nitrate and ammonia leachate contamination to watershed. A project has been proposed to remove the animal wastes from the feedlot area in order to remove this area source of pollution to the watershed. An application has been submitted to EPA to approve the concept of the project and to enter in negotiations on the work plan under the Sustainability Development Challenge Grant (SDGC).
- The Victory Acres Lagoon is another potential area source of nitrates to the Lower Salt River watershed. The lagoon is a holding pond for human wastewater after treatment by septic tanks. A small subdivision of homes is hooked into the septic system. The original purpose of the lagoon was for the wastewater to receive both evaporation and soil treatment. However, it is believed that the water receives little of either treatment. The SRPMIC has applied for to EPA under the Clean Water Act Section 319 (h) for funding to put a liner in the ponds. The liner will retain the wastewater for evaporation and the sediments then can be removed.

- The SRPMIC has applied to EPA for Clean Water Act Section 104 (b) (3) funds to restore wetland and riparian habitats in the Salt River. The restoration project will enhance the banks of the river and prevent further degradation of the areas near the river. In addition, the project will reduce the possibility of illegal dumping in this area and help reduce sediment loading in to the waters.

This map of Arizona displays 8-digit watershed areas, each labeled with a unique number. The map is color-coded to show different land ownership types: Tribal Land (dark gray), Private/State Land (light gray), and Federal Land (medium gray). NRCS Field Office locations are marked with black dots. Major cities and towns are labeled, including Phoenix, Tucson, Flagstaff, and Yuma. The map also shows the state's borders with California, Nevada, and Mexico.

**Legend:**

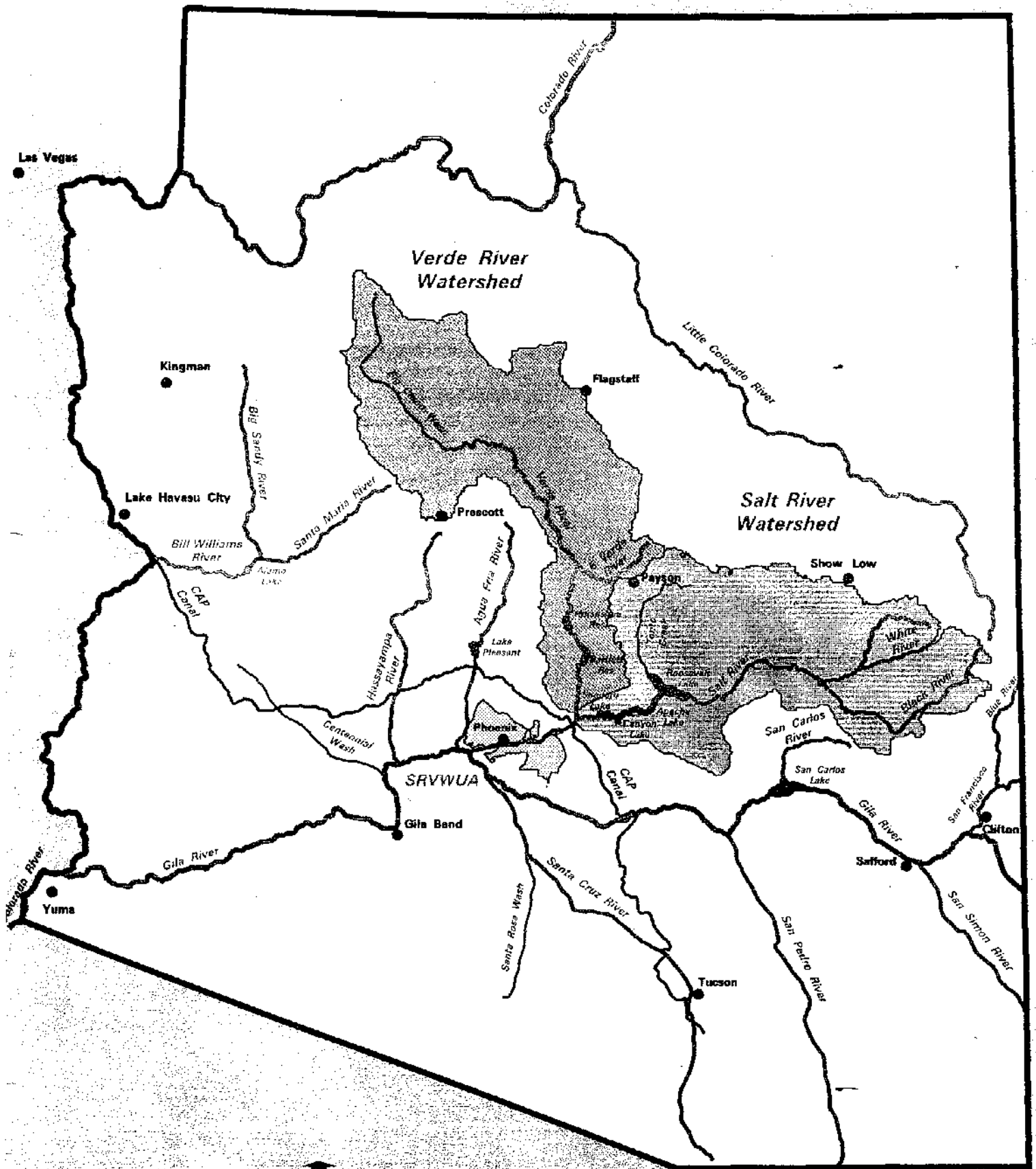
- Tribal Land
- Private/State Land
- Federal Land
- 8 Digit Watershed Areas
- NRCS Field Office Locations

June 1998  
Projection: UTM, Zone 12 Datum: NAD27  
Data Sources: ALRIS  
For Further Information Contact:  
Arizona NRCS State Headquarters — (602) 280-8801  
3003 N. Central Ave., Suite 800 — Phoenix, Arizona 85012

USDA

VERNON: Inmate map - Keith E. and

# SALT AND VERDE WATERSHEDS





**Salt River**  
**PIMA-MARICOPA INDIAN COMMUNITY**

10005 E. OSBORN RD. / SCOTTSDALE, ARIZONA 85256-9722 / PHONE (602) 850-8000

December 4, 1998

Unified Watershed Assessment Working Group  
U.S. Environmental Protection Agency  
Mail Code 4503F  
401 M Street, S.W.  
Washington, D.C. 20460

Re: Salt River Pima-Maricopa Indian Community  
Unified Watershed Assessment

Dear Working Group:

Enclosed is the FY'98 Unified Watershed Assessment and Watershed Restoration Priority list for the Salt River Pima-Maricopa Indian Community (SRPMIC) located in Scottsdale, Arizona.

Cultural and Environmental Services Division (CES) is submitting this information based on data generated from studies such as the Water Quality Assessment 305(b) Report, Section 106 Water Quality Management Plan and others. The watersheds were categorized, then prioritized according to the available information on known critical habitat for threatened and endangered species, existing nitrate area pollution sources and critical drinking supply areas.

The SRPMIC land covers two watersheds, the Lower Salt River watershed (15060106) and the Lower Verde River watershed (15060203). These watersheds were first categorized from the existing data, then prioritized through the prioritization process.

SRPMIC is submitting this Unified Watershed Assessment in accordance with key elements described in the Clean Water Action Plan which emphasizes cooperative approaches to watershed protection and focuses resources on improving the natural environmental and reducing public health threats. After a careful review by the CES Division, the SRPIMC disagrees with the State of Arizona's Assessment for the Lower Verde River watershed (15060203). Instead of being a category I watershed (an impacted watershed), CES found that the data available for the SRPMIC portion of the watershed was insufficient; thus, making it a Category IV watershed instead.

Unified Watershed Assessment Working Group  
December 4, 1998  
Page 2

Based on the CES review of the State of Arizona's Unified Watershed Assessment and list of priority watersheds, we find the state's assessment of Lower Salt River Watershed (15060106), which includes portions of the SRPMIC, to be consistent with our watershed analysis. We will continue to work cooperatively with state and federal agencies to address these and other environmental concerns.

We look forward to working with you in the future.

Sincerely,

A handwritten signature in cursive script that reads "Merna Lewis".

Merna Lewis  
Vice President

Enclosures(1)

Cc: Mr. Wendell Smith, EPA-Region 9